



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/920,182	08/01/2001	Ramesh Lhila	6001-45-1	4522

7590 12/11/2002

McCormick, Paulding & Huber
City Place II
185 Asylum Street
Hartford, CT 06103-3402

EXAMINER

VO, HAI

ART UNIT	PAPER NUMBER
----------	--------------

1771

DATE MAILED: 12/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/920,182

Applicant(s)

LHILA ET AL.

Examiner

Hai Vo

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 23-41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-22, drawn to an acrylic foam-like adhesive tape, classified in class 428, subclass 343.
 - II. Claims 23-41, drawn to a process of making an acrylic foam-like adhesive tape, classified in class 521, subclass various.
2. The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product as claimed can be made by another and materially different process such as by coextrusion instead of coating to make an article.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
3. During a telephone conversation with Arthur Dionne on 11/10/02 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-22. Affirmation of this election must be made by applicant in replying to this Office

Art Unit: 1771

action. Claims 23-41 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Objections

4. Claim 8 is objected to because of the following informalities: in line 3, the term "demethacrylate" is misspelled. Appropriate correction is required.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969). A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b). Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).
6. Claims 1-22 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-42 of copending Application No. 09/898,969 in view of Everaerts et al (US 5,695,837). Claims 1-42 of copending Application No. 09/898,969 read on every element of the presently claimed subject matter except the presence of at least one layer of heat activated adhesive disposed on one side of the backing. Everaerts discloses the acrylic adhesive can be formulated to be a pressure sensitive adhesive or a heat-activated adhesive by polymerizing methods (column 8, lines 39-43, claims 16 and

17). It would have been obvious to one having ordinary skill in the art at the time the invention was made to formulate the acrylic adhesive of the copending Application No. 09/898,969 to be a heat-activated adhesive motivated by the desire to obtain the adhesive composition that has excellent aging and light stability properties.

This is a provisional obviousness-type double patenting rejection.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

typo should be 1-9, 15, 17, 19 and 22

8. Claims 1-15, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Everaerts et al (US 5,612,136) in view of Everaerts et al (US 5,695,837). The recitation "a foam-like backing for acrylic pressure sensitive adhesive tapes" has not given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. ***Kropa v. Robie***, 88 USPQ 478 (CCPA 1951). The core layer of the pressure sensitive adhesive tape of Everaerts -136 is analogous to the backing layer of the claimed invention. Everaerts-136 discloses *the core layer comprising an acrylic copolymer which may incorporate similar or dissimilar acrylic monomers having similar or different additives from those*

Art Unit: 1771

acrylic copolymers contained in the adhesive layer. The core layer comprises about 80 parts or more of an alkyl acrylate monomer, and up to about 20 parts of a copolymerizable modifier monomer, based upon 100 parts by weight of acrylic monomer, i.e. alkyl acrylate monomer plus modifier monomer (column 9, lines 40-48). Everaerts -136 also discloses alkyl acrylate monomers of the adhesive layer can be formed from a mixture of two independent monomers (column 5, lines 20-25). Likewise, it is clearly apparent that the foam layer is formed from a mixture of two independent alkyl acrylate monomers. Everaerts -136 discloses modifier monomers can be formed from a mixture of two independent monomers, basic monomer and acidic monomer (column 5, lines 40-49). Likewise, it is clearly apparent that the foam layer is formed from a mixture of two independent modifier monomers. The examiner wishes to point out the claims do not require the first and the second monomers be different. Thus, the claimed weight percent of each monomer is essentially meaningless.

Everaerts-136 discloses the core layer comprising 5 to 65 volume percent of hollow glass microspheres (column 9, lines 40-43). However, the feature would have been recognized by one skilled in the art to promote the foam-like appearance of the core layer (column 9, line 53). As such, in the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the microsphere having the amount range instantly claimed, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill

Art Unit: 1771

in the art. *In re Aller*, 105 USPQ 233. Everaerts-136 fails to disclose at least one layer of heat-activated adhesive disposed onto one side of the core layer. Since the adhesive compositions in both primary and secondary references are identical and Everaerts-837 teaches the acrylic adhesive composition can be formulated to be a heat-activated adhesive by polymerizing methods (column 8, lines 39-43, claims 16 and 17). It would have been obvious to one having ordinary skill in the art at the time the invention was made to formulate the acrylic adhesive of Everaerts-136 to be a heat-activated adhesive motivated by the desire to obtain the adhesive composition that has excellent aging and light stability properties.

With regard to claims 2-4, Everaerts-136 discloses the core layer further comprising 0.05 to 0.5 % by weight of a photoinitiator and 0.05 to 1% by weight of a crosslinker (column 7, lines 41-42, column 9, lines 15-16 and column 9, line 65 et seq.). The amount ranges of the prior art encompass those as set forth in the claims.

With regard to claims 5-8, Everaerts-136 discloses the crosslinker being a multifunctional acrylate (column 7, line 41 et seq.).

With regard to claim 9, Everaerts-136 discloses the core layer further comprising a filler (column 10, line 1). Everaerts-136 is silent as to an amount of filler being present in the foam layer. However, such a variable would have been recognized by one skilled in the art to alter the properties of the foam layer. As such, in the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the filler having the amount instantly claimed since it has been held that where the general conditions of

a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

With regard to claims 12-15 and 19, Everaerts-136 discloses the first alkyl acrylate monomer being isooctylacrylate and the second alkyl acrylate monomer 2-ethylhexyl acrylate (column 5, lines 20-25), the first modifier monomer acrylic acid and the second modifier monomer acrylamide (column 5, lines 42-49). Everaerts-136 does not disclose the hollow microsphere is borosilicate glass. It is well-known in the glass microsphere art that borosilicate glass is a hollow microsphere. Everaerts-136 teaches the photoinitiator being benzoin ethyl ether (column 9, line 7). Everaerts-136 does not specially disclose the amount of each individual monomer in the foam layer, the feature would have been recognized by one skilled in the art as dependent upon the intended use of the product. As such, in the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the cited monomers having the amount ranges instantly claimed, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

With regard to claims ~~10~~, 11, ~~16~~ and 17, Everaerts-136 discloses a core layer of the pressure sensitive adhesive tape further comprising a filler (column 9, line 65 et seq.). Everaerts-136 discloses a core layer of the pressure sensitive adhesive tape further comprising a filler (column 9, line 65 et seq.). Everaerts-837 discloses hydrophobic silica being used as a filler in the core layer (column 9, line 64). It

would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the silica or the fumed hydrophobic silica as the filler of the core layer motivated by the desire to alter the properties of the core layer.

With regard to claim 22, Everaerts-837 discloses the recited structure of the claimed adhesive tape (column 10, lines 16-25). It would have been obvious to one having ordinary skill in the art at the time the invention was made to dispose one layer of heat-activated adhesive onto one side of the core and one layer of pressure sensitive adhesive onto the other side of the core because it is a typical, desirable structure of a double coated tape useful for permanent tape backings.

9. Claims 18, ~~20~~ and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Everaerts et al (US 5,612,136) in view of Everaerts et al (US 5,695,837) as applied to claim 12, further in view of Mazurek et al (US 5,264,278). The primary and secondary references fail to disclose 1,4-butanediol diacrylate as a crosslinker and coloring agent as a filler. Mazurek supplies the missing features. Mazurek discloses 1,4-butanediol diacrylate incorporated into the adhesive composition as a crosslinker and a dye being used as a filler (column 11, line 43, and column 12, line 41). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated 1,4-butanediol diacrylate into the core layer motivated by the desire to effect crosslinking. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated a dye into the core layer motivated by the desire to colorize the adhesive tape.

Art Unit: 1771

10. Claims 10 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Everaerts et al (US 5,612,136) in view of Everaerts et al (US 5,695,837) as applied to claims 1 and 12, further in view of Palazzotto et al (US 5,521,227). Everaerts-837 discloses hydrophobic silica being used as a filler in the core layer (column 9, line 64). The primary and secondary references fail to specify the hydrophobic silica being the fumed silica. Palazzotto discloses the hydrophobic silica essentially being a fumed silica (column 28, line 62 et seq.). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the fumed silica into the foam layer because the fumed silica is typically known as the hydrophobic silica.
11. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Everaerts et al (US 5,612,136) in view of Everaerts et al (US 5,695,837) as applied to claim 12, further in view of Palazzotto et al (US 5,521,227) and Mazurek et al (US 5,264,278). Everaerts-136 discloses the photoinitiator being benzoin ethyl ether (column 9, lines 6-7). Everaerts-837 discloses hydrophobic silica being used as a filler in the core layer (column 9, line 64). The primary and secondary references fail to specify the hydrophobic silica being the fumed silica. Palazzotto discloses the hydrophobic silica essentially being a fumed silica (column 28, line 62 et seq.). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the fumed silica into the foam layer because the fumed silica is typically known as the hydrophobic silica.

The primary, secondary and third references are silent as to 1,4-butanediol diacrylate in the core layer. Mazurek discloses 1,4-butanediol diacrylate being used as a crosslinker (column 11, line 43). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated 1,4-butanediol diacrylate into the core layer motivated by the desire to effect crosslinking.

Conclusion


12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (703) 605-4426. The examiner can normally be reached on Tue-Fri, 8:30-6:00 and on alternating Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Art Unit: 1771

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

HV
December 6, 2002



TERREL MORRIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700